DOCUMENT RESUME

ED 107 071 EC 072 855

| | |
|---|---|
| AUTHOR | Moore, William; And Others |
| TITLE | A Study of the Extreme Learning Problem Program in Oregon: 1971-72, 1972-73. |
| INSTITUTION | Oregon State System of Higher Education, Portland. |
| SPONS AGENCY | Oregon State Dept. of Education, Salem. |
| PUB DATE | 73 |
| NOTE | 38p. |
| EDRS PRICE | MF-$0.76 HC-$1.95 PLUS POSTAGE |
| DESCRIPTORS | Academic Achievement; Exceptional Child Research; Learning Disabilities; *Program Effectiveness; *Program Evaluation; *Reading Difficulty; Reading Skills; *Remedial Programs |
| IDENTIFIERS | *Extreme Learning Problem Programs |

ABSTRACT

A 2-year study of the Extreme Learning Problem (ELP) Programs in six school districts in Oregon was conducted to determine if ELP programs were changing students' reading behaviors, to measure the extent of any change, and to determine what factors contributed to changing the reading behavior of children served. The following were among the major findings reported: that pupils in ELP classes tended to make on the average more than a year's growth in reading as measured by the Metropolitan Reading Test (MRT), and pupils in the primary grades tended to make more reading progress as measured by the MRT than pupils at upper grade levels; that ELP pupils not in second or fourth grades who were returned to a regular classroom after 1 year of remediation tended to make less than a year's average growth in reading; and that the most successful ELP teachers used instructional materials in conjunction with regular classroom teachers. (GW)

ED107071

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# A STUDY OF THE EXTREME LEARNING PROBLEM PROGRAM IN OREGON

## 1971-72 – 1972-73

Prepared for

**Oregon State Department of Education**
**Department of Special Education**

By

Teaching Research Division of the
Oregon State System of Higher Education

William Moore
Roy Anderson
Ric Crowley
Bruce Dalke
John McDonnell
Melvin Bud Moore

EC 072 855

## TABLE OF CONTENTS


Introduction . . . . . 3

Design of Study . . . . . 4

Procedures . . . . . 4

Data Collection . . . . . 5

Analysis of Data . . . . . 10

Results – First Year – 1971-1972: . . . . . 10

Analysis of Variance Results . . . . . 12

A Review of First Year Findings – 1971-72 . . . . . 18

Results of the Second Year – 1972-73 . . . . . 18

Second Year Results . . . . . 18

1971-72 Group – Regular Classroom . . . . . 18

1971-72 Group (ELP Program) . . . . . 19

1972-73 Group – Metropolitan Test Results . . . . . 21

1972-73 Group – Informal Reading Inventory (IRI) Results . . . . . 25

Summary of Findings . . . . . 30

Conclusions . . . . . 30

Discussion . . . . . 30

# A STUDY OF THE EXTREME LEARNING PROBLEM PROGRAMS IN OREGON
## 1971-72 – 1972-73

### Introduction

This report presents the results of a two year study of the Extreme Learning Problem (ELP) Programs in six school districts in Oregon. The study, supported by the Oregon State Department of Education, Department of Special Education, was prompted by two separate developments. With the availability of ESEA Title 1 funds, a large number of children were identified as having academic deficiencies in the area of reading and they began receiving remedial instruction in this area. Concurrently, many children were being identified as having extreme learning problems in the academic setting, especially in the area of reading. These children also began receiving specialized remedial help, with major emphasis in the area of reading. Programs for the latter group were supported through the State Department's ELP programs. As programs for these two groups of children expanded, educators began questioning the effectiveness of remedial programs. The concept of accountability also made this questioning even more relevant to special projects such as the ELP and Title I programs. As a result of this questioning, the Oregon Board of Education contracted with Teaching Research to investigate the effects of remedial reading instruction in ELP and Title I programs in Oregon. For the purposes of this report, these two programs are identified as ELP and no differentiation will be made between ELP and Title I.

As defined by the State Department of Education, children placed in ELP classes are those identified as having potentially average or above average ability but who show an inability to profit from regular classroom instruction. They may become extreme under-achievers in reading, spelling or arithmetic if left in the regular classroom setting without special intervention. The broad category of extreme learning problems includes children labeled with such terms as brain injured, neurologically handicapped, minimally brain damaged, dyslexic, educationally handicapped and/or learning disabled.

Children in Title I programs are identified as educationally disadvantaged and are usually one or more years below their grade level placement in academic achievement.

Children with extreme learning problems are eligible for special services when it has been established that they have a learning disability that requires special education placement in order that they can obtain the education for which they are capable. This presupposes that they have the mental health and ability to benefit from special programs.

The major educational emphasis of ELP programs is in the area of reading and thus the major evaluative aspect of this study concentrated on the affects of these programs on the reading growth of the children served.

There were three major purposes of the study and they were to: (1) determine if ELP programs were changing children's reading behavior; (2) measure the extent of the change; and (3) determine what factors contributed to changing the reading behavior of the children served.

**Design of the Study**

With the assistance of the State Department of Special Education, six school districts were selected to participate in the study. The six were representative of districts in the state that conducted ELP programs and they represented some of the largest and smallest districts in the state. The six participating districts were, in alphabetical order: Bend, Bethel, Lake Oswego, Parkrose, Salem, and Springfield.

Subjects in the study were all of the new ELP pupils in the six districts entering the programs during the 1971-72 and 1972-73 school years. In addition to being members of the new intake population, subjects also must have had no previous remedial reading assistance in a special setting. All subjects from each district were under the direct supervision of the director of special education of that district.

Involvement in the study in no way required the participating districts to change any of their instructional procedures in their ELP programs. No whole class nor whole school comparisons were made and no attempt was made to evaluate the overall effectiveness of any teacher or district participating in the study.

Each district used its own unique procedure for selecting and identifying pupils to participate in the ELP program and these procedures were not altered. As part of the study, each district was required to administer a Metropolitan Reading Test to all entering ELP pupils. The level to be administered was dependent upon the grade level of the child. In addition, a Gilmore Oral Reading Test was also administered at this time. Districts had been encouraged to use Informal Reading Inventories (IRI), however, during the first year of the study not all teachers in all of the districts administered this test. During the second year of the study, all teachers did administer an IRI to the participating pupils.

**Procedures:**

For pretesting, after a child was selected to participate in the ELP program, teachers were asked to administer the appropriate Metropolitan Reading Test according to the child's grade placement. This test was administered to all new intake pupils reading above the first grade level. Teachers were also asked to administer the Gilmore Oral Reading Test and an IRI of their choice. As indicated, an IRI was not consistently administered during the first year of the study. For the purpose of posttesting, the Metropolitan and an IRI were administered at the end of the school year. The Gilmore Test was administered in the fall and was to be used as a posttest at the termination of the study. Different forms of all tests were used in the pre- and posttesting.

Children at the first grade level were administered the Metropolitan Primer Test on a pre- posttest basis. This test provided results in percentiles only and was used to measure the growth of the first grade pupils during their first grade year. In order to acquire a grade equivalent score for future evaluation, the first grade pupils were also administered the Metropolitan Primary I Test in the spring of their first year in school. The remainder of the pupils from Grades 2-7 who were reading above first grade level were administered the appropriate Metropolitan Reading Test for their grade level placement on a pre- posttest basis. In all cases, grade equivalent scores were used for purposes of analysis. Only the total reading scores were used for analysis because the reliability of the subtests were not as high as the total score.

During the first year of the study those children who could not read at a first grade level, as determined by the district's screening test, were administered an IRI to determine their beginning reading level. These children were then tested with the appropriate Metropolitan Reading Test for their grade level at the end of the first year of the study. For purposes of data analysis, these pupils had a pretest score from an IRI and a posttest score from a Metropolitan Test. Those children reading at a first grade level or higher at the beginning of the first year of the study were administered a Metropolitan Test for their grade level placement and the appropriate Metropolitan Test was administered at the end of the first year.

First Year 1971-72

| Children | Fall Testing | Spring Testing |
|---|---|---|
| First Graders | Metropolitan Primer Test<br>Gilmore (c)<br>IRI (optional) | Metropolitan Primer Test<br>Metropolitan Primary I (F)<br>IRI (optional) |
| Second-Ninth Graders reading below first grade level | IRI | Metropolitan according to grade level (F)<br>Gilmore (c)<br>IRI |
| Second-Ninth Graders reading above first grade level | Metropolitan according to grade level (F)<br>Gilmore (c)<br>IRI (optional) | Metropolitan according to grade level (G)<br><br>IRI (optional) |

**Figure 1**

**ELP Testing Schedule**
**Children Entering Study 1971-72**

In the second year, 1972-73, the new intake population followed the same testing procedure as that of the new intake population identified in the first year. In addition, they all received an IRI on a pre- posttest basis. Pupils identified in 1971-72 and who were still involved in the study, were posttested in the spring of 1973 with the appropriate Metropolitan Test for their grade level placement. The Metropolitan Test they were administered in the spring of 1972 served as their pretest. Because of the inclusion of the IRI Test, final testing was not conducted with the Gilmore Oral Reading Test.

**Data Collection:**

After a child had been accepted into the district ELP program, the teacher completed an information sheet for him. The teacher provided information concerning the child's age, grade level and I.Q. Also, she provided instructional information concerning the operation of the ELP classroom in which the child was enrolled, pretest scores from the test administered and information was provided concerning instructional procedures and the tests used to identify the child in the ELP program. An information sheet was also completed for the child at the end of the school year. This sheet included posttest scores and information on the instructional procedures and materials used in the child's program, both in the ELP and regular classroom setting. Figures 2 and 3 show the information sheets used. The information sheets that were completed when the child initially entered the program were sent to Teaching Research within a month after the child had entered the program. Those completed at the end of the school year were sent to Teaching Research within 30 days after completion of the school year. Information sheets received by Teaching Research were reviewed and then sent to the Computer Center at Oregon State University where common data for each subject was punched on IBM cards.

**ELP Study**
**1971-1972**

| For Office Use Only |
|---|
| D |
| ELP |
| C |
| CT |
| DATE RECEIVED |

1. Name of Child: _____
2. Name of ELP Teacher: _____
3. Date of Report: _____
4. Classroom Teacher(s) (Reading): _____
   _____
5. Sex: _____
6. Age: _____
7. Grade: _____
8. District: _____
9. IQ Score: _____
   Test: _____ (WISC or Binet)
   Date Administered: _____
10. Pupil-Teacher Ratio: _____
11. Number of Daily Sessions Per Week: _____
12. Length of Instructional Time Per Week: _____
13. Gilmore Oral Reading Grade Equivalent Scores:
    Form: _____
    Accuracy: _____
    Comp: _____
14. IRI Score _____
15. Please identify Initial Reading Instructional Level with which you began the child's program:
    Grade Equivalent Score: _____
16. Place the grade level scores on the appropriate blanks under the level for the Metropolitan Test administered:
    Form: _____
17. Sub-Tests:

| | K-1.5 Primer | 1.5-2.4 Prim. I | 2.5-3.4 Prim. II | 3.5-4.9 Elem. | 5.0-6.9 Inter. | 7.0-9.5 Adv. |
|---|---|---|---|---|---|---|
| a. Listening For Sounds | | | | | | |
| b. Reading | | | | | | |
| c. Word Analysis | | | | | | |
| d. Work Knowledge | | | | | | |
| e. Reading | | | | | | |
| f. Total Reading | | | | | | |

**Figure 2**

| | | Yes | No | |
|---|---|---|---|---|
| 18. | Does the ELP teacher teach in the regular classroom? (i.e., take class for teacher, teaches small group in regular class) | | | 18. |
| 19. | Does the ELP teacher teach in a special ELP room? (i.e., remedial reading room. ELP room, etc.) | | | 19. |
| 20. | Does the ELP teacher function as a resource teacher? (i.e., furnish materials, teaching suggestions or demonstrate methods only) | | | 20. |
| 21. | If none of the above, please describe: _____ | X | X | |
| 22. | Does the ELP teacher keep individual daily evaluation? | | | 22. |
| 23. | Does the classroom teacher keep individual daily evaluation? | | | 23. |
| 24. | Does the ELP teacher keep individual daily records on each child's progress? | | | 24. |
| 25. | Does the classroom teacher keep individual daily records on each child's progress? | | | 25. |
| 26. | Does the ELP teacher use a systematic procedure to reinforce children? | | | 26. |
| 27. | Does the classroom teacher use a systematic procedure to reinforce children? | | | 27. |

If the child was placed in the ELP program on the basis of other test scores, please list the names of the tests and the child's score.

| | TEST | GRADE EQUIVALENT SCORE | DATE |
|---|---|---|---|
| 28. | _____ | _____ | _____ |
| 29. | _____ | _____ | _____ |
| 30. | _____ | _____ | _____ |

Check the appropriate blank if the child was identified as having any of the following disorders:

31. Visual-perception problems: _____ 32. Auditory-Perception: _____

List any others besides those mentioned above:

33. _____

If the above disorders were identified through testing, list the name of the test and the score:

| | TEST | SCORE | DATE |
|---|---|---|---|
| 34. | _____ | _____ | _____ |
| 35. | _____ | _____ | _____ |

36. If tests were not used how was the disorder diagnosed?

_____

**Figure 2 Continued**

1. End of year report: Date: _____

2. Child terminated from ELP program/study: Date: _____

3. Name of Child: _____

4. Name of ELP Teacher: _____

5. Date of Report: _____

6. Classroom Teacher(s) (Reading): _____

| For Office Use Only |
|---|
| D _____ |
| ELP _____ |
| C _____ |
| CT _____ |
| DATE RECEIVED _____ |

7. Gilmore Oral Reading Grade Equivalent Scores: Form: _____

   Accuracy: _____ Comp.: _____

8. IRI Score: _____

9. Form: _____

| | % | Grade Equivalent Scores | | | | |
|---|---|---|---|---|---|---|
| | K-1.5 Primer | 1.5-2.4 Prim. I | 2.5-3.4 Prim. II | 3.5-4.9 Elem. | 5.0-6.9 Inter. | 7.0-9.5 Adv. |
| a. Listening For Sounds | | | | | | |
| b. Reading | | | | | | |
| c. Word Analysis | | | | | | |
| d. Word Knowledge | | | | | | |
| e. Reading | | | | | | |
| f. Total Reading | | | | | | |

| | Yes | No |
|---|---|---|
| 10. Does the ELP teacher teach in the regular classroom? (i.e., take class for teacher, teaches small group in regular class) ..... | | |
| 11. Does the ELP teacher teach in a special ELP room (i.e., remedial reading room. ELP room, etc.) ..... | | |
| 12. Does the ELP teacher function as a resource teacher? (i.e., furnish materials, teaching suggestions or demonstrate methods only) ..... | | |
| 13. If none of the above, please describe: _____ | X | X |
| 14. Does the ELP teacher keep individual daily evaluation? ..... | | |
| 15. Does the classroom teacher keep individual daily evaluation? ..... | | |
| 16. Does the ELP teacher keep individual daily records on each child's progress? ..... | | |
| 17. Does the classroom teacher keep individual daily records on each child's progress? | | |
| 18. Does the ELP teacher use a systematic procedure to reinforce children? ..... | | |
| 19. Does the classroom teacher use a systematic procedure to reinforce children? ..... | | |

**Figure 3**

20. Name of the ELP teacher using the materials checked:

21. Name of the classroom teacher using the materials checked:

| Reading Materials Utilized | ELP Teacher | Classroom Teacher |
|---|---|---|
| Basal Reading Series | | |
| Publisher: | | |
| | | |
| | | |
| Continental Press Worksheets | | |
| Distar Reading I | | |
| Distar Reading II | | |
| Distar Language I | | |
| Distar Language II | | |
| EDL Listening Tapes | | |
| EDL Word Clues | | |
| Flash Cards | | |
| Glass Analysis Decoding | | |
| Hegge, Kirk - Remedial Reading Drills | | |
| High Interest - Low Vocabulary Books | | |
| Know Your World | | |
| Lyons & Carnahan Phonics | | |
| McCormic Mathers Phonic Workbooks | | |
| Palo Alto Series (Harper-Row) | | |
| Phonics Games | | |
| Rambeau & Rambeau Readers | | |
| Readers Digest Skill Builders | | |
| Reading Games | | |
| Reading Puzzles | | |
| Scholastic Publications | | |
| SRA Kit - Name of Kit | | |
| | | |
| | | |
| | | |
| Sullivan Programmed Readers | | |
| McGraw-Hill | | |
| Behavioral Research Lab | | |
| Worksheets - Teacher-Made | | |
| | | |

| Reading Equipment Utilized | ELP Teacher | Classroom Teacher |
|---|---|---|
| Controlled reader | | |
| Films | | |
| Film strips | | |
| Language master | | |
| Overhead projector | | |
| Reading accelerator | | |
| Record Player | | |
| Tachistoscope | | |
| Tape recorder with listening posts | | |

**Figure 3 Continued**

**Analysis of Data:**

For the purpose of this study, each grade level was considered a separate population. Thus, all pupils at each grade in the six participating districts were considered as one group for data analysis. The amount of average reading growth made by each group of pupils at each grade level was reported. In addition, a set of variables that were selected on the basis of their probable contribution to reading growth were identified and their impact on the pupil's progress in reading was analyzed using analysis of variance techniques. The e variables were teacher, I.Q. of the pupil, sex, teacher/pupil ratio, length of instructional session and the number of instructional sessions conducted per week by the ELP teacher.

The average amount of reading growth obtained by each ELP teacher at each grade level was computed and the teachers were then ranked from the highest to the lowest on the basis of the average amount of reading growth they obtained with pupils at each grade level. The top 25 per cent of the teachers were identified "successful" and the lowest 25 per cent at each grade level were identified as "unsuccessful." The "successful" and "unsuccessful" teachers at each grade level were so identified in order that their teaching method and materials could be identified and then compared to determine the difference, if any, in the procedures used by these two groups of teachers.

**Results – First Year – 1971-72:**

Table 1 presents, by grade level, the number of pupils and teachers involved and the average growth in reading for the pupils. As can be seen, there was a total of 395 pupils identified during the first year of the study and there were 45 different teachers involved. These teachers taught across different grade levels and therefore, one teacher may be teaching children at the first, second and third grade level, or possibly third, fourth and fifth.

Results indicate that children in ELP programs were making progress in reading as measured by the Metropolitan Reading Test. The average gain for children at the first grade level was 33 per cent. This represents a gain of 33 percentile points as measured by the Metropolitan Primer Level Test. Pupils in the second and fourth grade made an average gain in reading of more than a year and a half, while pupils at the third grade level made almost one and three-quarters years' growth. At the fifth, sixth and seventh grade levels, the average growth decreased but it did not decrease to less than a year's average growth.

The number and per cent of pupils making more than a year's growth in reading is shown in Table 2. More than 70 per cent of the children at the second and third grade levels made more than a year's growth in reading, and 84.6 per cent of the first graders made this amount of growth. (Figures for the first graders were based on the first graders' total reading score as acquired from the Primary I Test administered in the spring.) None of the first graders were reading above first grade level when they started the year and many had very minimal reading skills. More than half of the fourth and fifth graders made more than a year's growth in reading.

**Table 2**

**Number of Children Making More Than A Year's Growth in Reading**

| Grade | Number of Pupils | Per Cent of Total Pupils |
|---|---|---|
| 1 | 25 | 84.6 |
| 2 | 73 | 71.1 |
| 3 | 71 | 70.1 |
| 4 | 20 | 59.1 |
| 5 | 10 | 54.4 |
| 6 | 5 | 44.4 |

**Table 1**

1971-72

**Number of Pupils, Teachers and Average Total Reading Scores by Grade Level**

| Grade Level | Number of Pupils | Number of Teachers | Average Growth in Total Reading (Metropolitan) |
|---|---|---|---|
| 1 | 52 | 5 | 33% |
| 2 | 128 | 32 | 1.52 |
| 3 | 124 | 31 | 1.73 |
| 4 | 49 | 24 | 1.58 |
| 5 | 35 | 20 | 1.28 |
| 6 | 18 | 11 | 1.13 |
| 7 | 7 | 1 | 1.21 |
| TOTAL | 395 | | |

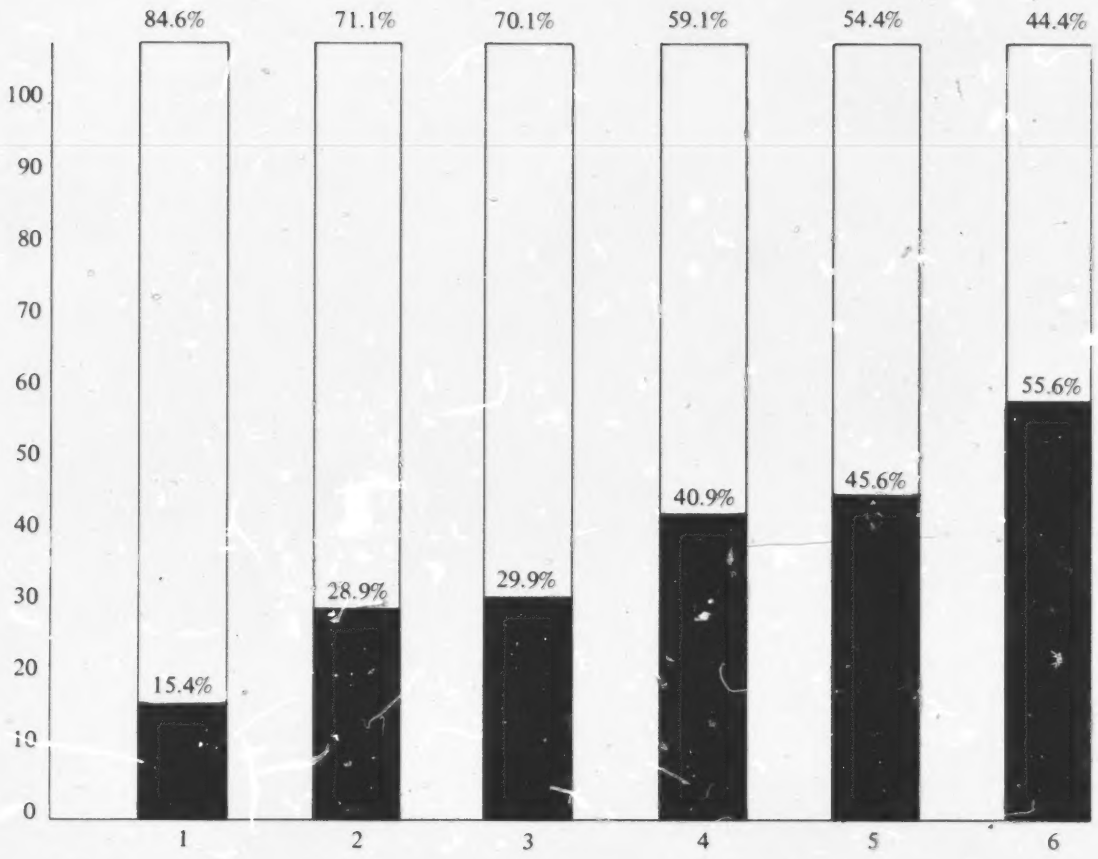


**Figure 4**

**Percent of Pupils by Grade Level Making More Than A Year's Growth In Reading and Those Making Less Than A Year's Growth**

Light Section = More Than A Year's Growth
Dark Section = Less Than A Year's Growth

Figure 4 depicts the per cent of pupils at each grade level making more than and less than a year's growth in reading. The pupils in the primary grades were more apt to make a year or more growth in reading than pupils in the upper grades.

**Analysis of Variance Results:**

The factors of teacher, I.Q., sex, teacher/pupil ratio, length of instructional session, and number of instructional sessions per week were identified as probable factors contributing to the reading success of ELP pupils. These factors were analyzed using analysis of variance techniques to determine their influence on the reading success of the pupils being served.

To further analyze the contribution that ELP teachers made to the reading success of the pupils, a group of "successful and unsuccessful" teachers were identified and their teaching methods and materials were compared. As mentioned earlier, to make this identification, the average amount of reading growth obtained by each teacher at each grade level was computed and the teachers were then ranked from the highest to the lowest on the basis of the average amount of reading growth that they obtained at each grade level. From this ranking, the top 25 per cent of the teachers were identified as "successful" and the lowest 25 per cent of the teachers were identified as "unsuccessful."

Table 3 presents the summary of the analysis of variance for the first grade group and none of the F ratios were significant.

One successful teacher was identified at the first grade level and she reported teaching in a special ELP room and maintaining daily progress records and providing systematic reinforcement to her pupils. She taught children on a one-to-one basis, conducted three teaching sessions per week, 20 minutes per each session. The reading material she used included Open Court Readers, Distar Reading I, Distar Language I, Frostig Worksheets and Peabody Language Development Kits.

The one unsuccessful teacher at this level reported teaching in a self-contained ELP room. She maintained daily progress records and provided systematic reinforcement. She taught children on a one-to-four basis, conducted four teaching sessions per week, 30 minutes per each session. She reported using Distar Reading I and Ginn basal reading materials.

Table 4 presents the summary of analysis of variance for the second grade group. The F ratio for teachers was significant at the .01 level of confidence. None of the other F ratios were significant.

**Table 3**
**Summary of Analysis of Variance**
**Grade 1**

| Source | Sum of Squares | Degrees of Freedom | Mean Squares | F |
|---|---|---|---|---|
| Teachers | 1.93 | 5 | 3.86 | .56 |
| I.Q. | 8.72 | 1 | 8.72 | 1.27 |
| Sex | 3.04 | 1 | 3.04 | .04 |
| Teacher/Pupil Ratio | 2.38 | 1 | 2.38 | 3.45 |
| Length of Sessions | 4.29 | 1 | 4.29 | .06 |
| Number of Sessions | 1.95 | 1 | 1.95 | .28 |
| Error | | 23 | | |

**Table 4**
**Summary of Analysis of Variance**
**Grade 2**

| Source | Sum of Squares | Degrees of Freedom | Mean Squares | F |
|---|---|---|---|---|
| Teachers | 3.07 | 31 | 9.92 | 2.26* |
| I.A. | 1.33 | 1 | 1.33 | .30 |
| Sex | 3.95 | 1 | 3.95 | .90 |
| Teacher/Pupil Ratio | 2.34 | 1 | 2.34 | .53 |
| Length of Sessions | 3.86 | 1 | 3.86 | .88 |
| Number of Sessions | 1.35 | 1 | 1.35 | .03 |
| Error | | 91 | | |

*P<.01; an F of 1.89 is necessary for significance at the .01 level of confidence.

Eight successful teachers were identified at this grade level and the procedures and materials that they used in their instructional program are presented in Table 5. Eighty-seven and a half per cent of these teachers reported working both in the regular classroom and in a special ELP classroom. Twenty-five per cent of them reported that they worked as a resource teacher to the regular classroom teacher. One half or more of them conducted daily evaluation and maintained daily progress records and used systematic reinforcement procedures. The average pupil/teacher ratio and the number of weekly instructional sessions and length of daily sessions is also shown. Materials used by 50 per cent or more of the successful teachers are presented. Seventy-five per cent of them used high interest-low vocabulary books and sixty-two and a half per cent of them used some form of reading games.

Table 6 presents the procedures and materials used by the unsuccessful teachers. All of these teachers taught in a special ELP room and eight-seven and a half per cent reported keeping daily progress records. Seventy-five per cent of them reported using teacher-made worksheets.

**Table 5**

**Procedures and Materials Used By Successful Teachers (N=8)**

**Grade 2**

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classroom | 87.5 |
| Taught in Special ELP Room | 87.5 |
| Functional as a Resource Teacher | 25.0 |
| Conducted Daily Evaluation | 62.5 |
| Maintained Daily Progress Records | 87.5 |
| Used a Systematic Reinforcement Procedure | 50.0 |
| Average Pupil/Teacher Ratio | 1:3 |
| Average Number of Sessions Per Week | 4 |
| Average Length of Each Daily Session | 20 Min. |
| **Materials** | |
| Flash Cards for Sight Words | 50.0 |
| High-Interest, Low-Vocabulary Books | 75.0 |
| MacMillan Basal Reading Series | 50.0 |
| Phonics Games | 50.0 |
| Reading Games | 62.5 |
| Stearns Structural Materials | 50.0 |

**Table 6**

**Procedures and Materials Used By Unsuccessful Teachers (N=8)**

**Grade 2**

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classroom | 12.5 |
| Taught in Special ELP Room | 100.0 |
| Functioned as a Resource Teacher | 25 |
| Conducted Daily Evaluation | 62.5 |
| Maintained Daily Progress Records | 87.5 |
| Used A Systematic Reinforcement Procedure | 75 |
| Average Pupil/Teacher Ratio | 1:3 |
| Average Number of Sessions Per Week | 4 |
| Average Length of Each Daily Session | 27 Min. |
| **Materials** | |
| Film Strips | 50.0 |
| Miami Linguistic Readers | 50.0 |
| Palo Alto Series | 50.0 |
| Phonics Games | 87.5 |
| Reading Games | 62.5 |
| Worksheets, Teacher-Made | 75.0 |

Table 7 presents the results of the analysis of variance for the third grade group. The F ratios for teachers and teacher/pupil ratios were significant at the .01 level of confidence. The length of sessions F ratio was significant at the .05 level of confidence.

**Table 7**
**Summary of Analysis of Variance**
**Grade 3**

| Source | Sum of Squares | Degrees of Freedom | Mean Squares | F |
|---|---|---|---|---|
| Teachers | 5.45 | 30 | 1.82 | 3.93** |
| I.Q. | 6.73 | 1 | 6.73 | 1.46 |
| Sex | 6.94 | 1 | 6.94 | .15 |
| Teacher/Pupil Ratio | 4.29 | 1 | 4.29 | 9.29** |
| Length of Sessions | 1.89 | 1 | 1.89 | 4.10* |
| Number of Sessions | 2.23 | 1 | 2.23 | .48 |
| Error | | 88 | | |

*p<.05; an F 3.96 is necessary for significance at the .05 level of confidence.
**p<.01; an F of 6.96 is necessary for significance at the .01 level of confidence

Seven third grade teachers were identified as successful and all of these teachers reported working in a special ELP room and all of them also reported maintaining daily progress records. Over half of them conducted daily evaluation of their pupils' progress, fourteen per cent of them worked in the regular classroom setting and functioned as a resource teacher to the regular classroom teachers. Fifty per cent of them utilized the instructional materials shown in Table 8.

**Table 8**
**Procedure and Materials Used by Successful Teachers (N=7)**
**Grade 3**

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classroom | 14.0 |
| Taught in Special ELP room | 100.0 |
| Functioned as a Resource Teacher | 14.0 |
| Conducted Daily Evaluation | 57.0 |
| Maintained Daily Progress Reports | 100.0 |
| Used a Systematic Reinforcement Procedure | 43.0 |
| Average Pupil/Teacher Ratio | 1:3 |
| Average Number of Weekly Sessions | 3 |
| Average Length of Each Daily Session | 20 Min. |
| **Materials** | |
| Flash Cards for Sight Words | 57.0 |
| Lyons-Carnahan Basal Reading Series | 57.0 |
| Phonics Games | 57.0 |
| Reading Games | 57.0 |
| Teacher/Made Worksheets | 57.0 |

Procedures and materials used by the unsuccessful teachers at this level are presented in Table 9. All seven of the teachers taught in a special ELP room and none of them worked in the regular classroom setting. Approximately 86 per cent of them reported maintaining daily progress records and using systematic reinforcement procedures. All of them used phonic games and teacher-made worksheets.

**Table 9**
**Procedure and Materials Used by Unsuccessful Teachers (N=7)**
**Grade 3**

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classroom | 100.0 |
| Taught in Special ELP Room | 14.2 |
| Functioning as a Resource Teacher | 71.6 |
| Conducted Daily Evaluation | 85.8 |
| Maintained Daily Progress Records | 85.8 |
| Used Systematic Reinforcement Procedure | 85.8 |
| Average Pupil/Teacher Ratio | 1:3 |
| Average Number of Sessions Per Week | 4 |
| Average Length of Each Daily Session | 13 Min. |
| **Materials** | |
| Flash Cards | 86.0 |
| High Interest-Low Vocabulary Books | 86.0 |
| Phonics Games | 100.0 |
| Reading Games | 86.0 |
| Worksheets | 100.0 |

## Table 10
## Summary of Analysis of Variance

### Grade 4

| Source | Sum of Squares | Degrees of Freedom | Mean Squares | F |
|---|---|---|---|---|
| Teachers | 3.91 | 23 | 1.70 | 2.15* |
| I.Q. | 2.70 | 1 | 2.70 | 3.41 |
| Sex | 1.54 | 1 | 1.54 | .00 |
| Teacher/Pupil Ratio | 1.32 | 1 | 1.32 | 1.66 |
| Length of Sessions | 1.70 | 1 | 1.70 | .21 |
| Number of Sessions | 9.13 | 1 | 9.13 | 1.15 |
| Error | | 20 | | |

*$p < .05$: an F of 2.08 is necessary for significance at the .05 level of confidence.

As noted in Table 7, the F ratios for teacher/pupil ratio and length of sessions were significant. In comparing the successful and unsuccessful teachers, it can be seen that there was very little difference between these two groups of teachers on the variables of pupil/teacher ratio and length of session. Both had an average one-to-three pupil/teacher ratio and both groups had an average length of sessions within two minutes of each other.

Table 10 presents a summary of the analysis of variance for the fourth grade group. The F ratio for teachers was significant at the .05 level of confidence.

Six successful teachers were identified and their procedures and materials are presented in Table 11. More than eighty per cent of the successful teachers worked in a special ELP room and 16 per cent of them taught in a regular classroom. None of them functioned as resource teacher to the regular teaching staff. Half of them conducted daily evaluations, used systematic reinforcement procedures, and eighty-three per cent of them maintained daily progress records. Half of them reported using flash cards, high interest-low vocabulary books, Conquests in Reading (a reading program by William Kottmeyer), and reading games. More than 66 per cent of the successful teachers reported using phonics games.

## Table 11
## Procedures and Materials Used by Successful Teachers (N=6)

### Grade 4

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classrooms | 16.7 |
| Taught in Special ELP Room | 83.5 |
| Functioned as a Resource Teacher | |
| Conducted Daily Evaluation | 50.0 |
| Maintained Daily Progress Records | 83.5 |
| Used a Systematic Reinforcement Procedure | 50.0 |
| Average Pupil/Teacher Ration | 1:4 |
| Average Number of Sessions Per Week | 4 |
| Average Length of Daily Sessions | 30 Min. |
| **Materials** | |
| Flash Cards for Sight Words | 50.0 |
| High Interest-Low Vocabulary Books | 50.0 |
| Conquests in Reading (William Kottmeyer, auther) | 50.0 |
| Phonics Games | 66.7 |
| Reading Games | 50.0 |

Table 12 presents the procedures and materials used by the six unsuccessful teachers at the fourth grade level. Eight-three per cent of them taught in a special ELP room and all of them reported maintaining daily progress records. Eighty-three per cent of them used flash cards and phonics games in their instructional program.

Table 13 presents the analysis of variance for the fifth grade group and none of the F ratios were significant.

**Table 12**
**Procedures and Materials Used by Unsuccessful Teachers (N=6)**
**Grade 4**

| Procedures | Per Cent | Materials | |
|---|---|---|---|
| Taught in Regular Classroom | 16.6 | Flash Cards | 83.0 |
| Taught in Special ELP Room | 83.0 | High Interest-Low Vaocabulary Books | 50.0 |
| Functioned as a Resource Teacher | | Lyons and Carnahan Phonics | 50.0 |
| Conducted Daily Evaluation | 66.4 | Phonics Games | 83.0 |
| Maintained Daily Progress Records | 100.0 | Reading Puzzles | 50.0 |
| Used A Systematic Reinforcement Procedure | 83.0 | Tape Recorder | 50.0 |
| Average Pupil/Teacher Ratio | 1:3 | Worksheets (Teacher-Made Materials) | 66.0 |
| Average Number of Sessions Per Week | 4 | Reading Games | 50.0 |
| Average Length of Each Daily Session | 23 Min. | | |

**Table 13**
**Summary of Analysis of Variance**
**Grade 5**

| Source | Sum of Squares | Degrees of Freedom | Mean Squares | F |
|---|---|---|---|---|
| Teachers | 3.12 | 30 | 1.56 | 1.74 |
| I.Q. | 7.37 | 1 | 7.37 | .82 |
| Sex | 1.00 | 1 | 1.00 | 1.12 |
| Teacher/Pupil Ratio | 2.26 | 1 | 2.26 | 2.52 |
| Length of Sessions | 2.31 | 1 | 2.31 | 2.57 |
| Number of Sessions | 2.11 | 1 | 2.11 | .24 |
| Error | | 9 | | |

Five successful teachers were identified at this level and the procedures and materials they used are presented in Table 14. All five reported teaching in a special ELP room and one of them also functioned as a resource teacher to regular classroom teachers. Two of them conducted daily evaluations and used systematic reinforcement procedures. In addition, sixty per cent of them maintained daily progress records. Eighty per cent of them used high interest-low vocabulary books and phonics games.

In Table 15 the procedures and materials used by the five unsuccessful teachers are presented. All of them taught in the special ELP room and kept daily progress records. In addition, all of them used high interest-low vocabulary books and reading games.

**Table 14**
**Procedures and Materials Used by Successful Teachers (N=5)**
**Grade 5**

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classroom | 100.0 |
| Taught in Special ELP Room | 20.0 |
| Functioned as a Resource Teacher | 20.0 |
| Conducted Daily Evaluation | 40.0 |
| Maintained Daily Progress Records | 60.0 |
| Used a Systematic Reinforcement Procedure | 40.0 |
| Average pupil/teacher Ratio | 1:5 |
| Average Number of Weekly Sessions | 4 |
| Average Length of Daily Session | 27 Min. |
| **Materials** | |
| Flash Cards for Sight Words | 60.0 |
| High Interest-Low Vocabulary Books | 80.0 |
| Phonics Games | 80.0 |
| Reading Games | 60.0 |

**Table 15**
**Procedures and Materials Used By Unsuccessful Teachers (N=5)**
**Grade 5**

| Procedures | Per Cent |
|---|---|
| Taught in Regular Classroom | |
| Taught in Special ELP Room | 100.0 |
| Functioned as a Resource Teacher | 20.0 |
| Conducted Daily Evaluation | 60.0 |
| Maintained Daily Progress Records | 100.0 |
| Used a Systematic Reinforcement Procedure | 40.0 |
| Average Pupil/Teacher Ratio | 1:3 |
| Average Number of Sessions Per Week | 4 |
| Average Length of Each Daily Session | 17 Min. |
| **Materials** | |
| High Interest-Low Vocabulary Books | 80.0 |
| McGraw-Hill Programmed Readers and Skill Cards | 60.0 |
| Phonics Games | 60.0 |
| Reading Games | 80.0 |
| Reading Puzzles | 60.0 |
| Worksheets | 100.0 |

Table 16 presents the summary of the analysis of variance for the sixth grade group. The F ratios for teacher/pupil ratio, length of session, and number of sessions were all significant at the .05 level of confidence.

**Table 16**
**Summary of Analysis of Variance**
**Grade 6**

| Source | Sum of Squares | Degrees of Freedom | Mean Squares | F |
|---|---|---|---|---|
| Teachers | 1.25 | 10 | 1.25 | 4.70 |
| I.Q. | 1.89 | 1 | 1.89 | 4.45 |
| Sex | 3.26 | 1 | 3.26 | .12 |
| Teacher/Pupil Ratio | 2.84 | 1 | 2.84 | 10.67* |
| Length of Sessions | 2.92 | 1 | 2.92 | 10.96* |
| Number of Sessions | 2.68 | 1 | 2.68 | 10.43* |
| Error | | 3 | | |

*$p<.05$; an F of 10.13 is necessary for significance at the .05 level of confidence.

Two successful teachers were identified at this grade level and both of them taught in an ELP room and one of them reported conducting daily evaluations, maintaining daily progress records, and using a systematic reinforcement procedure. The average pupil/teacher ratio was one-to-two. The average number of weekly sessions was four and the average length of each instructional session was 24 minutes. There was no consistency in the instructional materials used by these two teachers.

Two unsuccessful teachers were identified at this grade level and both of them reported that they taught in an ELP room while one reported maintaining daily evaluations and progress records and using systematic reinforcement procedures. Their average pupil/teacher ratio was one-to-four, the average number of weekly sessions was five and the average length of each daily lesson was 42 minutes.

There was only one teacher reporting information on students at the seventh grade level. No analysis was conducted on her procedures. The average reading growth of her students was 1.21 years.

**A Review of First Year Findings – 1971-72:**

The overall average test results indicated that at all grade levels ELP pupils were making progress in reading. The average gain for all groups in grades 2 through 7 was more than one year with the third grade showing an average gain of 1.73 years and the second and fourth grades showing more than 1.50 year's growth. However, the average growth in the fifth, sixth and seventh grades was from .25 to .60 grade equivalent scores less than in grades one through four.

These results suggest that the sooner pupils can be identified and provided with special instructional assistance, the more apt they are to profit from this assistance.

The analysis of variance results indicated that the teachers at the second, third and fourth grade levels were a significant factor in the reading progress of the pupils at these levels. Comparison of the successful and unsuccessful teachers at all grade levels did not produce any data that indicated a significant difference in the procedures or materials used by these two groups of teachers. The one factor that is paramount in this comparison is that on the basis of the information reported, these two groups of teachers are quite similar. This would indicate that there are factors operating that were not identified during this first year that would differentiate between successful and unsuccessful teachers. This fact was taken into consideration when planning the analysis for the second year of the study.

**Results of the Second Year – 1972-73:**

During the second year of the study, there were basically two populations of pupils involved. One was the group of pupils identified during the first year of study and carried over into the second year and secondly, there was the population of new entering ELP pupils enrolled in the program for the first time during the 1972-73 school year. These groups formed the two populations of pupils involved in the study during the second year.

Pupils identified during the 1971-72 year were divided into two groups – those returned to the regular classroom prior to Janaury of 1973 and those pupils still in the ELP program after January of 1973.

All new pupils identified in the program in 1972-73 were administered an IRI on a pre- posttest basis. All first grade pupils were administered the Primer Metropolitan Test on a pre- posttest basis. In addition, those pupils in the second grade and higher who were reading above the first grade level were administered the appropriate Metropolitan Reading Test for their grade level placement. This was also done on a pre- posttest basis. Those students who received only the IRI test on a pre- posttest basis had their reading progress reported on the basis of this test only. Those pupils who were administered both an IRI and a Metropolitan test had their reading progress reported on the basis of both tests.

**Second Year Results:**

In the second year of the study 295 (74 per cent) of the original 395 pupils were still identified in the study. Eighty-four (21 per cent) were in regular classroom settings and 211 (53 per cent) were still in the ELP program. The 100 pupils no longer involved had moved during the year.

**1971-72 Group – Regular Classroom:**

Table 17 presents the reading results of the 84 pupils (21 per cent) returned to the regular classroom setting. The greatest number of pupils were returned to the third and fourth grades; these pupils were originally identified in the second and third grade and these were the two grade levels where the greatest number of pupils were originally identified during the 1971-72 year.

Table 17
Number of Pupils and Average
Total Reading Scores by Grade Level
(Regular Classroom)
1971-72 Group

| Grade Level | Number of Pupils | Average Growth in Reading (Metropolitan) |
|---|---|---|
| 2 | 10 | 1.22 |
| 3 | 22 | .82 |
| 4 | 26 | 1.13 |
| 5 | 12 | .56 |
| 6 | 7 | .89 |
| 7 | 7 | -.03 |
| TOTAL | 84 | |

Table 18
Number of Pupils and Average Total Reading Scores
by Grade Level
(ELP Program)
1971-72 Group

| Grade | Number of Pupils | $\bar{x}$ Growth in Reading (Metropolitan) |
|---|---|---|
| 2 | 33 | .94 |
| 3 | 77 | 1.08 |
| 4 | 57 | .80 |
| 5 | 16 | 1.05 |
| 6 | 21 | .89 |
| 7 | 1 | .60 |
| 8 | 6 | 1.17 |
| TOTAL | 211 | |

Average gain scores indicate that pupils at the second and fourth grade levels made more than a year's average growth in reading. Pupils at the third and sixth grade levels made more than eight months' growth in reading while pupils at the fifth grade level made approximately a half a year's growth. Pupils at the seventh grade level showed a decrease in reading as measured by the Metropolitan Test. These results indicate that pupils at the second and fourth grade levels continued to make better than average growth in reading while those at the third and sixth grade levels made approximately average growth. There is no other data available on the pupils returned to the regular classroom setting. The regular classroom teachers did not supply any further information and it was reported by the ELP teachers that they were unable to acquire further data from them. It was reported that once the child was returned to the classroom setting he became a regular member of the classroom and functioned as part of that group. The only information provided by the classroom teacher was the pupils' Metropolitan score and in many instances these tests were administered by the ELP teacher.

**1971-72 Group: (ELP Program)**

Of the 395 pupils originally identified in the ELP Study in 1971-72, 211 (53 per cent) of them remained in the ELP Program during the second year of the study.

Table 18 presents the number of pupils at each grade level and their average reading scores. The majority of the pupils remaining in the ELP program were in the third and fourth grade and as reported earlier these were the two grades where the greatest number of pupils were originally identified. Scores indicate that the average growth in reading of the third, fifth and eighth grade pupils was more than a year. Pupils at the second grade level made .94 average growth while pupils at the fourth and sixth grade levels made approximately eight months' growth.

The factors of teacher, I.Q., sex, teacher/pupil ratio, length of instructional sessions and number of instructional sl sessions per week were analyzed using analysis of variance techniques to determine their influence on the reading growth of the pupils at each grade level. These analyses indicated that none of the F ratios were significant on any of the factors at any grade level.

The procedure of identifying successful and unsuccessful teachers was followed as described earlier. A comparison of the procedures and materials used by these two groups indicated that there were no differences on these variables between the two groups. These findings are similar to those found in the first year of the study.

To further analyze the materials and procedures being used, an examination was conducted of the reading materials used by the successful and unsuccessful ELP teacher and regular classroom teacher in whose room the pupils were enrolled. (As can be noted on the second page of Figure 3, the pupils' ELP and classroom teacher indicated the reading material being used with the child. This was done since the pupils were receiving reading instruction in both the ELP program and regular classroom.) The examination of reading materials used by the ELP and classroom teacher was done to determine the extent to which the ELP and classroom teacher used similar materials. The number of ELP and classroom teachers using the same instructional materials was determined and then the similar materials were examined to determine which, if any, were structured materials. Structured materials were defined as those having stated goals and objectives and having a systematic instructional sequence as part of their program. For example, basal reading materials and reading kits such as SRA would fit this definition.

Table 19 presents a summary of this examination. The results indicate that the successful ELP teacher was much more apt to use the same instructional material as the classroom teacher and the similar materials tended to be structured.

Table 19

Successful ELP and Classroom Teacher
Material Usage

1971-72 Group

| Grade | # of ELP Teachers | # and % Using Same Materials as Classroom Teacher | | # and % Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| 2 | 3 | 2 | 66 | 1 | 50 |
| 3 | 6 | 6 | 100 | 5 | 83 |
| 4 | 6 | 6 | 100 | 5 | 83 |
| 5 | 3 | 2 | 66 | 1 | 50 |
| 6 | 3 | 2 | 66 | 1 | 50 |
| TOTAL | 21 | 18 | | 13 | |

Unsuccessful ELP and Classroom Teacher
Material Usage

1971-72 Group

| Grade | # of ELP Teachers | # and % Using Same Materials as Classroom Teacher | | # and % Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| 2 | 3 | 2 | 66 | 1 | 50 |
| 3 | 6 | 3 | 50 | 0 | 0 |
| 4 | 6 | 3 | 50 | 1 | 33 |
| 5 | 3 | 0 | 0 | 0 | 0 |
| 6 | 3 | 1 | 33 | 0 | 0 |
| TOTAL | 21 | 9 | | 2 | |

Table 20 presents a summary comparison of the successful and unsuccessful ELP teachers in relation to their use of instructional materials in conjunction with classroom teachers. Twenty-one successful and unsuccessful ELP teachers were identified and of the successful, 18 (85 per cent) used the same instructional material as the classroom teacher whereas with the unsuccessful, nine (45 per cent) used the same materials. Furthermore, 13 (72 per cent) of the successful ELP teachers using the same materials used the same structured materials as the classroom teacher whereas two (22 per cent) of the unsuccessful teachers used the same structured material as the classroom teacher. These results indicate the strong tendancy of the successful ELP teacher to not only use instructional materials in conjunction with classroom teachers but also to use the same structured instructional material.

The most common structured material used in combination by the ELP and classroom teacher was either a basal reading series or the Distar reading materials. There was no consistency in basal materials across grade levels, for a number of different basal materials were in use by ELP and classroom teachers. However, the consistent factor here is that the successful ELP teacher and classroom teacher did use the same structured material with their common pupils. Thus, the pupils who were making the most growth in reading had two reading periods, one with the ELP teacher and one with the classroom teacher and these pupils used the same instructional materials in both settings. (For a complete list of the instructional materials used by the successful and unsuccessful ELP teachers, the reader should contact Teaching Research in Monmouth, Oregon.)

**Table 20**
**Comparison of Successful and Unsuccessful ELP Teachers in Use of Instructional Materials with Classroom Teacher**
**1971-72 Group (Metropolitan Scores)**

| | | Using Same Material As Classroom Teacher | | Using Same Structured Materials as Classroom Teacher | |
|---|---|---|---|---|---|
| | # | # | % | # | % |
| Successful | 21 | 18 | 85 | 13 | 72 |
| Unsuccessful | 21 | 9 | 44 | 2 | 22 |

**1972-73 Group – Metropolitan Rest Results:**

Table 21 presents the average reading growth for the new pupils identified during the 1972-73 school year. As can be noted, 362 pupils were assessed on a pre- posttest basis with the Metropolitan Reading Test. The average reading results indicate that the pupils at all grade levels made more than a year's growth in reading, with the pupils in the first grades showing the highest average growth.

**Table 21**
**Number of Pupils and Average Total Reading Scores by Grade Level**
**1972-73 Group**

| Grade Level | Number of Pupils | Average Growth in Total Reading (Metropolitan) |
|---|---|---|
| 1 | 67 | 1.63 |
| 2 | 134 | 1.57 |
| 3 | 97 | 1.62 |
| 4 | 35 | 1.35 |
| 5 | 17 | 1.24 |
| 6 | 9 | 1.08 |
| 7 | 3 | 1.37 |
| TOTAL | 362 | |

Tables 22 and 23 present the number of pupils making more than or less than a year's growth in reading. Two hundred and fifty-nine pupils made a year or more growth in reading while 103 made less than a year's growth in reading. Figure 5 presents this data graphically and it can be noted that pupils in grades one through four were more apt to make a year or more growth in reading as compared with the pupils in the fifth and sixth grades. Only three pupils were identified at the 7th grade level and all three made more than a year's growth in reading.

**Table 22**
**Number of Pupils Making a Year or More Growth in Reading – Metropolitan**

**1972-73 Group**

| Grade | Number of Pupils | Per Cent of Total Pupils |
|---|---|---|
| 1 | 60 | 89.5 |
| 2 | 96 | 71.6 |
| 3 | 65 | 67.0 |
| 4 | 24 | 68.5 |
| 5 | 8 | 47.0 |
| 6 | 3 | 33.3 |
| 7 | 3 | 100.0 |
| TOTAL | 259 | |

**Table 23**
**Number of Pupils Making Less Than A Year's Growth in Reading – Metropolitan**

**1972-73 Group**

| Grade | Number of Pupils | Per Cent of Total Pupils |
|---|---|---|
| 1 | 7 | 10.5 |
| 2 | 38 | 38.4 |
| 3 | 32 | 33.0 |
| 4 | 11 | 31.5 |
| 5 | 9 | 53.0 |
| 6 | 6 | 66.7 |
| 7 | 0 | 0 |
| TOTAL | 103 | |

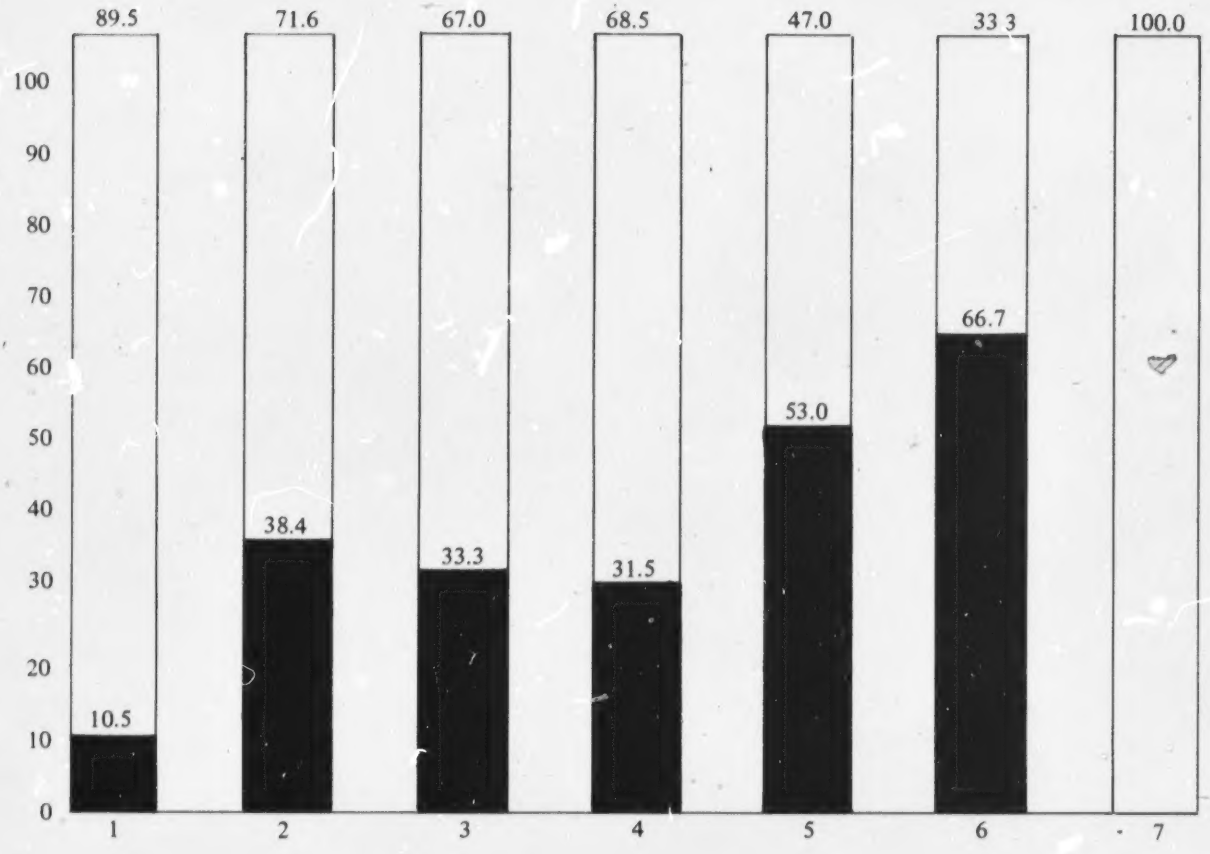


**Figure 5**

**Percentage of pupils by grade level making more than and less than a year's growth in reading**

Light section – more than a year's growth
Dark section – less than a year's growth

1972-73 Group
(Metropolitan)

Analysis of variance techniques were used to determine the influence of the teacher, I.Q., sex, pupil/teacher ratio, length of instructional session, and the number of instructional sessions per week on the reading progress of the pupils. None of the F ratios at any of the grade levels were significant.

As in the previous analysis, the successful and unsuccessful ELP teachers were identified. The procedures and materials used by these two groups of teachers did not differ to any significant degree.

The instructional materials used by the successful and unsuccessful teachers were compared with those used by classroom teachers, with pupils they served in common, to determine the number of ELP teachers in both groups using the same instructional materials as the regular classroom teacher and also to determine the number using the same structured material.

Table 24 presents the results of the comparison of the use of instructional materials by the successful and unsuccessful ELP teachers in conjunction with the classroom teacher and their use of the same structured material. Twenty-eight successful teachers were identified and thirteen of them used the same instructional material as the classroom teacher and of these, twelve used the same structured material as the classroom teacher. Thirty unsuccessful ELP teachers were identified and 14 of them used the same instructional material as the classroom teacher and five of the 14 used the same structured materials as the classroom teacher. There were two more unsuccessful ELP teachers identified as compared to successful because two of them obtained the same amount of progress with the pupils they served so both were included in the unsuccessful group.

**Table 24**
**Successful ELP and Classroom Teacher Material Usage**
**1972-73 Group**

| Grade | # of ELP Teachers | # and % Using Same Material as Classroom Teacher | | # and % Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| 1 | 3 | 2 | 66 | 2 | 100 |
| 2 | 8 | 3 | 38 | 2 | 66 |
| 3 | 7 | 3 | 43 | 3 | 100 |
| 4 | 5 | 2 | 40 | 2 | 100 |
| 5 | 3 | 2 | 66 | 2 | 100 |
| 6 | 2 | 1 | 50 | 1 | 100 |
| TOTAL | 28 | 13 | | 12 | |

**Unsuccessful ELP and Classroom Teacher Material Usage**
**1972-73 Group**

| Grade | # of ELP Teachers | # and % Using Same Material as Classroom Teacher | | # and % Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| 1 | 3 | 3 | 100 | 0 | 0 |
| 2 | 8 | 3 | 38 | 3 | 100 |
| 3 | 7 | 4 | 57 | 0 | 0 |
| 4 | 5 | 2 | 40 | 1 | 50 |
| 5 | 5 | 2 | 40 | 1 | 50 |
| 6 | 2 | 0 | 0 | 0 | 0 |
| TOTAL | 30 | 14 | | 5 | |

Table 25 presents a summary of the comparison of the successful and unsuccessful ELP teachers and their use of instructional materials in conjunction with classroom teachers. Of the successful teachers, 46.4 per cent used the same material as classroom teachers with the pupils they served in common and this was nearly identical with the per cent of unsuccessful teachers (46.6 per cent) using the same instructional materials and classroom teachers. However, 92.3 per cent of the successful teachers used structured material in conjunction with the classroom teacher whereas only 35.7 per cent of the unsuccessful teachers used the same structured materials as the classroom teacher. The structured materials that were used most often by the successful ELP teacher and classroom teacher were either the Distar reading materials or the Open Court Reading Series. These two sets of materials comprised the greatest number of structured materials used in conjunction between the successful ELP teacher and classroom teacher. (For a complete list of the materials used by the successful and unsuccessful ELP teachers in conjunction with classroom teachers, contact Teaching Research, Monmouth, Oregon.)

## Table 25

### Comparison of Successful and Unsuccessful ELP Teachers in Use of Instructional Materials with Classroom Teachers

**1972-73 Group (Metropolitan Scores)**

| Total Number | | Using Same Material As Classroom Teachers | | Using Same Structured Material as Classroom Teachers | |
|---|---|---|---|---|---|
| | # | # | % | # | % |
| Successful | 28 | 13 | 46.4 | 12 | 92.3 |
| Unsuccessful | 30 | 14 | 46.6 | 5 | 35.7 |

**1972-73 Group – Informal Reading Inventory (IRI) Results:**

Of the new intake population identified in 1972-73, three hundred fourteen of them received in IRI on a pre-posttest basis. Average growth measured by an IRI is presented in Table 26. It can be seen that the average growth in reading, as measured by an IRI, was more than a year for all groups except those at the first grade level. The greatest amount of growth was shown at the fourth and fifth grade levels.

## Table 26

### Number of Pupils and Average Informal Reading Inventory Scores by Grade Level

| Grade Level | Number of Pupils | Average Growth on Informal Reading Inventory |
|---|---|---|
| 1 | 64 | .57 |
| 2 | 113 | 1.15 |
| 3 | 85 | 1.34 |
| 4 | 32 | 1.64 |
| 5 | 14 | 1.99 |
| 6 | 6 | 1.58 |
| TOTAL | 314 | |

Tables 27 and 28 present the number and per cent of pupils at each grade level making more than and less than a year's growth in reading as measured by an IRI. These results indicate that pupils at the upper grade levels, especially the fourth and fifth, were more apt to make a year or more growth in reading as compared to the pupils at the primary grade levels. This same data is depicted in Figure 6.

Table 27

Number of Pupils Making a Year or More
Growth in Reading on Informal Reading Inventory

| Grade | Number of Pupils | Per Cent of [illegible] Pupils |
|---|---|---|
| 1 | 6 | 9 |
| 2 | 56 | 50 |
| 3 | 28 | 33 |
| 4 | 25 | 78 |
| 5 | 11 | 79 |
| 6 | 4 | 66 |

Table 28

Number of Pupils Making Less Than A Year's
Growth on Informal Reading Inventory

| Grade | Number of Pupils | Per Cent to Total Pupils |
|---|---|---|
| 1 | 58 | 91 |
| 2 | 57 | 50 |
| 3 | 57 | 67 |
| 4 | 7 | 22 |
| 5 | 3 | 21 |
| 6 | 2 | 34 |

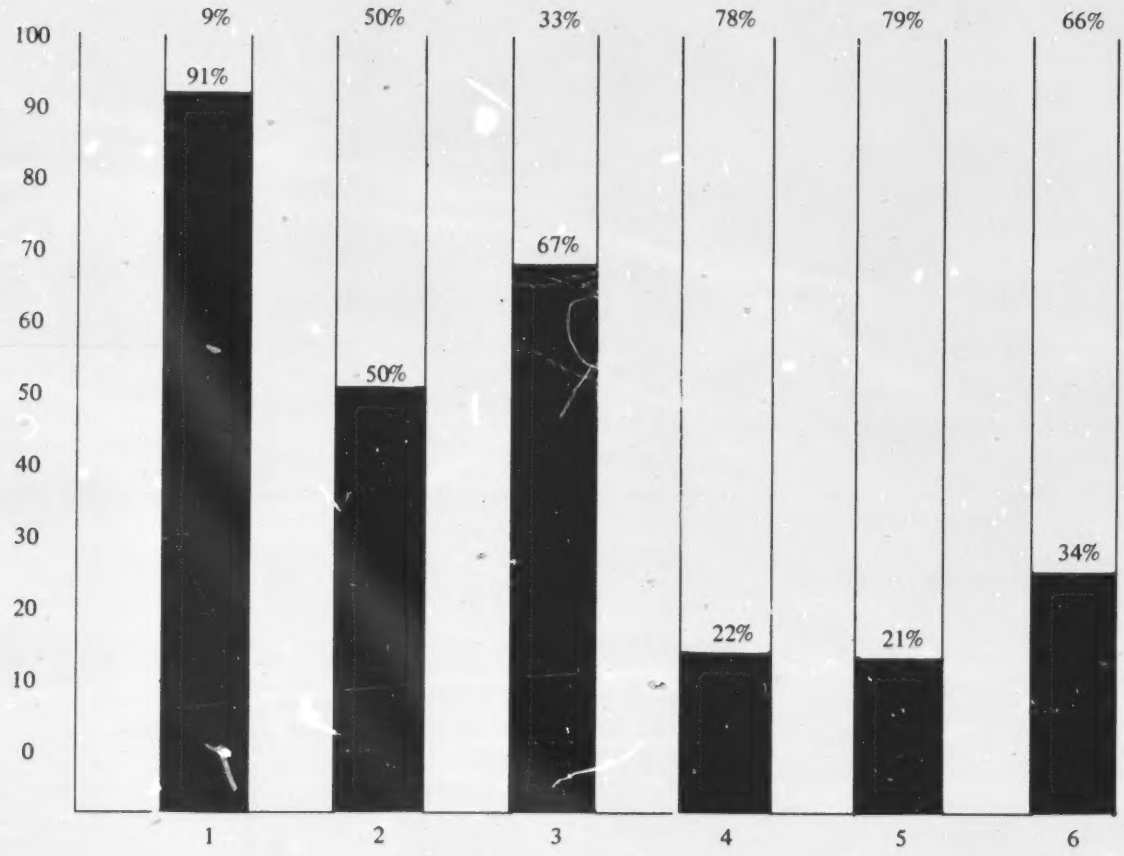


**Figure 6**

**Percent of pupils by grade level making more than and less than a year's growth in reading**

Light section – more than a year's growth
Dark section – less than a year's growth

1972-73 Group
(IRI)

Analysis of variance techniques were used with the IRI results to determine the impact of the variables identified in the previous analysis and results indicated that none of the F ratios were significant. The successful and unsuccessful ELP teachers were identified using IRI results and the materials that they used in conjunction with the regular classroom teachers were examined.

Table 29 presents the data showing the number of successful and unsuccessful ELP teachers who used the same instructional materials as the child's classroom teacher and the number using structured material in conjunction with the classroom teacher. Again, the successful ELP teachers were more apt to use material in conjunction with the classroom teacher and this was much more a factor in the comparison of the use of structured material as seventeen of the successful ELP teachers used these materials in conjunction with the classroom teachers while only two of the unsuccessful teachers used structured materials in conjunction with the classroom teacher.

**Table 29**

**Successful ELP and Classroom Teacher Material Usage**

**1972-73 Group**

| Grade | # of ELP Teachers | # and % Using Same Material as Classroom Teacher | | # and % Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| 1 | 3 | 3 | 100 | 3 | 100 |
| 2 | 7 | 6 | 86 | 3 | 50 |
| 3 | 7 | 7 | 100 | 5 | 72 |
| 4 | 5 | 5 | 100 | 3 | 60 |
| 5 | 4 | 4 | 100 | 2 | 50 |
| 6 | 2 | 2 | 100 | 1 | 50 |
| TOTAL | 28 | 27 | | 17 | |

**Unsuccessful ELP and Classroom Teacher Material Usage**

**1972-73 Group (IRI)**

| Grade | # of ELP Teachers | # and % Using Same Material as Classroom Teacher | | # and % Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| 1 | 4 | 2 | 50 | 0 | 0 |
| 2 | 11 | 4 | 36 | 1 | 25 |
| 3 | 7 | 6 | 86 | 0 | 0 |
| 4 | 5 | 2 | 40 | 1 | 50 |
| 5 | 3 | 1 | 33 | 0 | 0 |
| 6 | 2 | 1 | 50 | 0 | 0 |
| TOTAL | 32 | 16 | | 2 | |

In Table 30, it can be noted that 96.4 per cent of the successful ELP teachers used the same materials as the classroom teachers and 62.9 per cent of them used the same structured material as the classroom teacher whereas with the unsuccessful teachers, only 50 per cent of them used the same structured materials as the classroom teacher and only 12.5 per cent used the same structured materials. The materials that were used most consistently by the successful ELP teachers in conjunction with the classroom teachers were basal readers with the Open Court Reader being the most frequent one used. In addition, Distar reading material and the Hegge, Hegge, Kirk Remedial Reading Drills were used with a high degree of frequency by the successful ELP teacher in conjunction with the classroom teacher.

**Table 30**

**Comparison of Successful and Unsuccessful ELP Teachers in Materiai Usage With Classroom Teachers**

| Total Number | | Using Same Material as Classroom Teacher | | Using Same Structured Material as Classroom Teacher | |
|---|---|---|---|---|---|
| | # | # | % | # | % |
| Successful | 28 | 27 | 96.4 | 17 | 62.9 |
| Unsuccessful | 32 | 16 | 50.0 | 2 | 12.5 |

**Summary of Findings:**

The most important findings are listed below:

1. Pupils in ELP classes tended to make, on the average, more than a year's growth in reading as measured by the Metropolitan Reading Test, and pupils in the primary grades tended to make more growth in reading as measured by this test than pupils at the upper grade levels.

2. In using an IRI as a pre- posttest measure, pupils in ELP programs showed an average growth of more than a year in reading at all levels except the first grade.

3. Metropolitan and IRI scores provide different group averages in that primary level pupils obtained higher reading scores on the Metropolitan and upper level pupils obtained higher reading scores on the IRI. This suggests that these two tests may be measuring different aspects of reading.

4. Using analysis of variance techniques to examine the factors of teacher, I.Q., sex, teacher/pupil ratio, length of instructional sessions, and number of instructional sessions per week, there were few significant F ratios. The factors of teaching procedures and materials used by identified successful and unsuccessful ELP teachers showed minimal differences.

5. ELP pupils returned to a regular classroom setting after one year of remediation tended to make less than a year's average growth in reading. Only pupils at the second and fourth grade showed more than a year's average growth.

6. The most consistent difference between the successful and unsuccessful ELP teachers was in their use of instructional materials in conjunction with classroom teachers. The successful ELP teacher used structured instructional material in conjunction with the classroom teacher with the pupils they served in common to a much greater degree than did the unsuccessful teachers.

7. Structured instructional materials that were most frequently used in conjunction by successful ELP teachers and classroom teachers were basal reading materials and Distar Reading materials.

**Conclusions:**

The following conclusions can be drawn from the results of this study:

1. Children served in ELP programs made better than average growth in reading as compared to the normal expectancy of one year's growth in reading for one year of instruction.

2. ELP pupils in the primary grades made greater growth in reading than pupils at the upper grade levels.

3. ELP pupils returned to a regular classroom setting after one year of reading intervention made less progress in reading than those pupils retained in the ELP program for a second year.

4. ELP teachers who used instructional materials in conjunction with regular classroom teachers obtained more growth in reading with the pupils they served than those ELP teachers who did not use similar materials with the classroom teachers.

**Discussion:**

Results of this study indicate that pupils being served in the ELP programs are making progress in reading. Their reading growth tends to be better than average in that the majority of them made more than a year's growth in reading for a year of instruction. The ELP program is having the greatest impact on pupils at the primary grades for it is at these levels where the largest growth in reading is occurring. These results support the efforts being made by the Department of Special Education to identify pupils as early as possible who are either experiencing difficulties in learning to read or who have potential learning difficulties. As these primary level children are identified, they become high priority candidates for assistance from the ELP program. It is recommended that the Department of Special Education continue their emphasis to provide services to primary level pupils.

Because of the overall reading growth obtained by the pupils served, it is further recommended that the Department of Special Education continue to provide support to the ELP programs in the state. Success in reading is crucial to a child's progress in school and the ELP programs are providing assurances to the children served that they will acquire the skills necessary to progress in reading.

Those pupils who received only one year of remediation in the ELP programs and were then returned to the regular classroom made less progress in that setting than pupils retained in the ELP program for a second year. Decisions for terminating ELP services to a child were not clearly defined within or across districts. By specifying the reading goals a child is to attain before services are terminated or by providing follow-up assistance to the child returned to the classroom, the ELP program might insure better reading success for pupils terminated.

Those ELP teachers who used similar instructional materials in conjunction with classroom teachers had the most success in changing the reading behavior of the pupils they served. This change was more apparent when the ELP and classroom teacher used the same structured material. Pupils served by these teachers received two instructional periods per day, one with the ELP teacher and the other with the classroom teacher. The degree to which these teachers cooperated and shared information was not determined. One can only assume that they informed each other of the lessons they covered and the success they were achieving so that they would not duplicate the material the child was covering.

If the ELP and classroom teacher worked cooperatively and achieved success in teaching a child while he was in the ELP program it would seem logical that some degree of cooperative effort should be maintained once the child has been returned to the regular classroom. At this time, the ELP teacher could function as an instructional resource to the teacher, providing her with suggestions for teaching materials and strategies to be used with the pupils previously in the ELP program. Some ELP teachers function in this role, but more should be encouraged to do so. By so doing, they may further insure the reading success of the former ELP pupil returned to the regular classroom setting.

With the continued efforts being made to maintain children with special learning problems in the regular classroom setting, it is imperative that the Department of Special Education encourage their staff to assist regular classroom teachers in meeting the needs of these pupils for often times the classroom teacher has minimal skills to do this. One way to do this would be to require that the ELP teachers work directly with classroom teacher as well as with pupils. Results of the study would support these efforts. To further encourage these efforts, the Department of Special Education should consider conducting summer workshops for ELP and classroom teachers from the same school. The purpose of these workshops would be to train the ELP teacher in strategies for working with classroom teachers and provide the classroom teacher with prescriptive teaching techniques. These workshops would be a step toward insuring closer cooperation between the specialist and the classroom teacher.